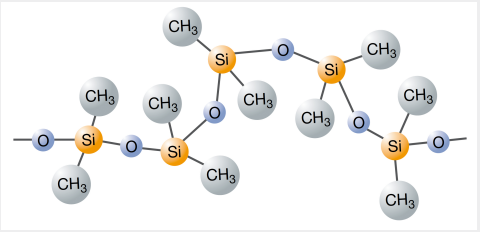
HELISOL® XLP

Linear Silicone Fluids

HELISOL® XLP is a linear, non-reactive poly-dimethylsiloxane with a viscosity of approx. 35 mm^2/s. Due to its chemical structure, HELISOL® XLP has an outstanding property profile, which sets it apart from organic materials such as mineral oils.



Properties

HELISOL® XLP is a clear, odorless and colorless liquid.

- high heat resistance
- low pourpoint
- lower density than water
- low viscosity
- long life
- low fouling potential
- non-corrosive
- no hazard classification

Specific features

- Fluid
- Good heat stability
- Heat resistant
- Silicone Fluid
- Stable upon heating

Technical data

General Characteristics

Property	Condition	Value	Method
Appearance	-	clear	-
Acid number	-	< 0.005 mg KOH/g	-
Boiling point	1013 hPa	> 380 °C	EU-GL.A.2
Chemical characterization	-	Polydimethylsiloxane	-
Color	-	colorless	-
Density	-	approx. 0.95 g/cm^3	DIN 51757
Flash point	-	222 °C	Pensky-Marten
Ignition temperature	-	376 °C	EN 14522
Odor	-	odorless	-
Solubility	-	virtually insoluble	-
Thermal conductivity	25 °C	0.1516 W/m.K	-
Vapour pressure	not determinable	-	-
Viscosity, kinematic	-	33 - 38 mm^2/s	DIN 53019

These figures are only intended as a guide and should not be used in preparing specifications.

After Extendet Use

Property	Value	Method
Appearance	clear	-
Color	colorless to dark brown	-
Density	approx. 0.95 g/cm^3	DIN 51757
Flash point	69 °C	Pensky-Marten
Ignition temperature	366 °C	EN 14522
Odor	musty	-
Solubility	virtually insoluble	-
Thermal conductivity	0.1352 W/m.K	-
Viscosity, kinematic	approx. 12 mm^2/s	DIN 53019

These figures are only intended as a guide and should not be used in preparing specifications.

Applications

- Renewable Energies

Application details

- heat transfer fluid in closed systems under inert conditions from -40 °C up to 425 °C.
- recommended use in liquid phase
- maximum permitted working temperature: 425 °C
- maximum permitted film temperature: 450 °C

Packaging and storage

Packaging

- 0.5 kg bottle
- 5 kg can
- 25 kg drum
- 200 kg drum
- 950 kg IBC

Storage

Maximum temperature allowed during storage and transportation: 50 °C

A temporary increase in temperature during transport does not impair quality. Actively cooled transport guide can be dispensed with.

The 'Best use before end' date of each batch is shown on the product label.
Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Safety notes

Reactivity; Chemical stability; Possibility of hazardous reactions
No hazardous reactions known if properly stored.
When it is used as intended (up to 425 °C), amounts (< 25%) of a mixture of D-cyclic siloxanes (including octamethylcyclotetrasiloxane (D4, CAS 556-67-2) and decamethylcyclopentasiloxane (D5, CAS 541-02-6)) are formed. This depresses the flash point and increases the vapor pressure.

Conditions to avoid
Permeation of oxygen and water or any contamination at operating temperature.

Incompatible materials
None known.

Hazardous decomposition products
When it is used as intended (up to 425 °C), it has been found that in the absence of oxygen and after relatively long operating times, extremely small quantities of methane, hydrogen and volatile silanes (tetramethylsilane, CAS 75-76-3 and trimethylsilane, CAS 993-07-7) may be produced, which further depress the flash point.
Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries or may be printed via WACKER web site http://www.wacker.com.

QR Code HELISOL® XLP

For technical, quality or product safety questions, please contact:

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